

## Gulf of Mexico Harmful Algal Bloom Bulletin

7 August 2006 NOAA Ocean Service NOAA Satellites and Information Service Last bulletin: August 3, 2006

## **Conditions Report**

A harmful algal bloom has been identified from southern Sarasota to northern Collier County. In southern Sarasota and Charlotte Counties, patchy very low to low impacts are possible today through Wednesday and patchy moderate to high impacts are possible Wednesday afternoon through Thursday. In northern Lee County, patchy very low impacts are possible today though Thursday with patchy low to moderate impacts on Wednesday and Thursday afternoons. No impacts are expected for southern Lee County. In northern Collier County, patchy very low impacts are possible today through Thursday with patchy low impacts expected on Wednesday and Thursday afternoons.

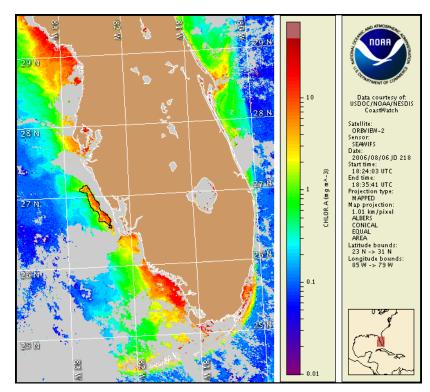
## **Analysis**

A harmful algal bloom persists from southern Sarasota to northern Collier Counties. The most recent imagery (8/6) is obscured by clouds at the coast from Manatee to Lee Counties; however, the western edge of the bloom extends from 27°8'57"N, 82°41'33"W west of Sarasota County to 26°31'19"N, 82°16'49"W west of Captiva Island in Lee County. Two high chlorophyll regions (>21 $\mu$ g/L) exist, and they are each centered at 26°55'32"N, 82°31'3" and 26°46'8"N, 82°24'19"W. South of Sanibel Island chlorophyll levels are approximately 3-6  $\mu$ g/L while they are as high as 13  $\mu$ g/L between Sanibel and Estero Islands at the mouth of San Carlos Bay. Further sampling is highly recommended offshore of Sarasota, Charlotte, and Lee Counties. High chlorophyll levels (12-32 $\mu$ g/L) are present in the vicinity of the Pinellas National Wildlife Refuges. Sampling is recommended. The wind transport model indicates that the bloom moved northward approximately 15-25 km since the last bulletin (8/3).

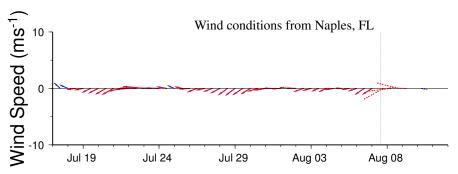
Afternoon onshore winds on Wednesday and Thursday will increase impacts from southern Sarasota to northern Collier Counties. Easterlies and southeasterlies today through Thursday may transport the bloom further offshore.

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

"Urizar, Fenstermacher



Satellite chlorophyll image with possible HAB areas shown by red polygon(s).



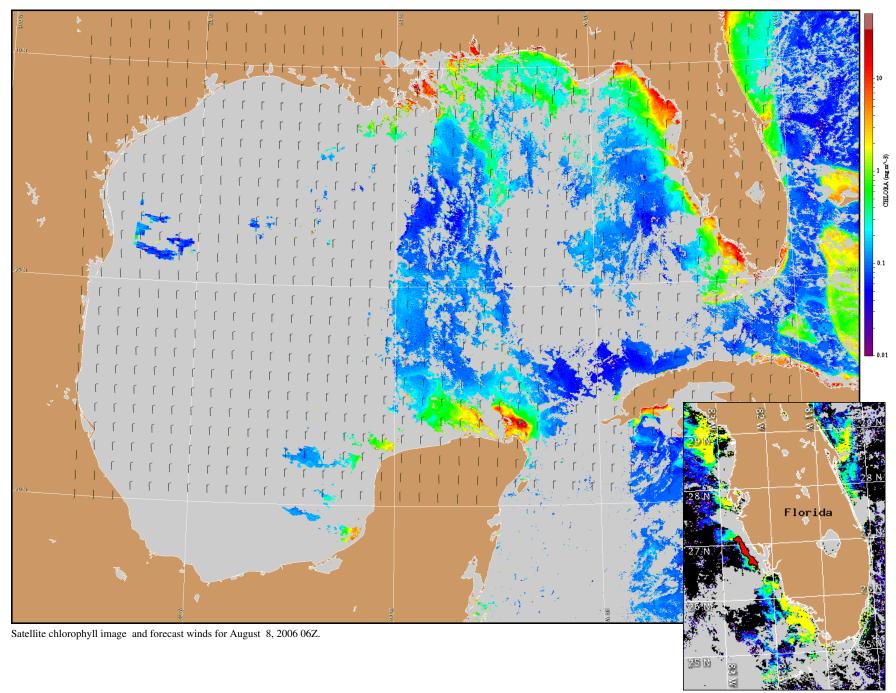
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Sarasota County: Easterly winds at 10-15 knots (5-8 m/s) today through Tuesday night. Southeasterly winds at 10 knots (5 m/s) Wednesday with onshore winds in the afternoon becoming light and variable (5 kts, 3 m/s) Wednesday night. Southerlies at 5 knots (3 m/s) on Thursday.

Charlotte, Lee, and Collier Counties: Easterly winds at 10-15 knots (5-8 m/s) today through Tuesday night. Southeasterlies Wednesday and Thursday at 5-10 knots (3-5 m/s) with onshore winds in the afternoons.

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Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

